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| APPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------|---------------------------------|----------------------|------------------------|------------------|--|
| 10/657,482 | 09/08/2003 | Hilary S. Lackritz | LWBAP101USA | 2664 | |
| 23623 | 23623 7590 04/22/2004 | | EXAMINER | | |
| AMIN & TU | ROCY, LLP TH STREET, NATIONA | ROSENBERGE | ROSENBERGER, RICHARD A | | |
| 24TH FLOOR | , | ART UNIT | PAPER NUMBER | | |
| CLEVELAND | , | | 2877 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|---|---|---|---------|--|--|
| | | Application | on No. | Applicant(s) | | | |
| | Office Astion Comments | 10/657,48 | 32 | LACKRITZ ET AL. | | | |
| Office Action Summary | | Examiner | | Art Unit | | | |
| | | | Rosenberger | 2877 | | | |
| Period fe | The MAILING DATE of this communication or Reply | n appears on the | cover sheet with the | correspondence address | | | |
| THE - Exte after - If the - If NO - Failt Any | ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI nsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicatic e period for reply specified above is less than thirty (30) days, or period for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event on. , a reply within the statu period will apply and wi statute, cause the appl | ent, however, may a reply be t utory minimum of thirty (30) da Il expire SIX (6) MONTHS fror ication to become ABANDON | imely filed ys will be considered timely. In the mailing date of this communic ED (35 U.S.C. § 133). | eation. | | |
| Status | | | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | | |
| · | | This action is n | on-final. | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposit | ion of Claims | | | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) 1-21 is/are pending in the application of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) 1-21 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction as | hdrawn from coi | | | | | |
| Applicat | ion Papers | | | | | | |
| - | The specification is objected to by the Exa The drawing(s) filed on is/are: a) | | objected to by the | Examiner. | | | |
| • | Applicant may not request that any objection to | o the drawing(s) b | e held in abeyance. So | ee 37 CFR 1.85(a). | | | |
| 11) | Replacement drawing sheet(s) including the compact to the compact of the control | · | | | | | |
| Priority | under 35 U.S.C. § 119 | | | | | | |
| a) | Acknowledgment is made of a claim for fo All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International B See the attached detailed Office action for | ments have bee ments have bee priority docume ureau (PCT Rul | n received. n received in Applica ents have been receive 17.2(a)). | tion No /ed in this National Stage | ; | | |
| 2) Notice 3) Infor | nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-94 mation Disclosure Statement(s) (PTO-1449 or PTO/S er No(s)/Mail Date <u>9/8/03</u> . | | 4) Interview Summar Paper No(s)/Mail [5] Notice of Informal 6) Other: | | | | |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoppe et al (US 6,570,657) in view of Naya (US 5,917,607), what is presented in the instant specification as being known in the prior art, and Verber et al (US 4,394,060).

Hoppe et al shows a known surface plasmon system with a plurality of test areas (C1, C2, C3) and a scanning arrangement (5) for sequentially directing light to the different areas. Naya also shows this, using a different scanning arrangement. It would have been obvious to use any known scanning means to thus sequentially direct the light to the different areas because it is the sequential presentation of the light to the different test areas and not the particular scanning means that is of functional importance to the operation of the device; the difference between the scanning means if Hoppe et al and of Naya demonstrates that those in the art realize that the scanning means can be varied in form while maintaining the function of sequential testing. Among the known scanners are various scanners in the form of optical integrated circuits; Verber et al is a single example of such a known scanner. Verber et al discloses the optical integrated circuit scanner

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disclosed therein as a substitute for a moving-mirror type scanner; see column 1, lines 11-16, 45-50, and disclosed the advantages including being very compact, with a high scanning speed and sweep rate, and not requiring precise adjustment during assembly (column 1, 46-50). It would have been obvious to use such a known scanner because it is known to perform the function of scanning with the scanners of Hoppe et al and Naya perform and is thus a recognized functional equivalence and to obtain the art-recognized advantages of such a known scanner.

Hoppe et al teaches the use of a spectrometer (7). This instant specification mentions the use of an "arrayed waveguide grating spectrometer" (the sentence bridging pages 41 and 42). The instant specification treats such spectrometers as known in the art; the specification does not show the structure of such spectrometers or teach those in the art to make and use them, and thus the instant specification is consistent only with such spectrometers and their uses being known. As these are known spectrometers, thus use of this known spectrometer for the spectrometer of Hoppe et al would have been obvious because of the art-recognized functional equivalence and because of the art-recognized advantages such as those mentioned Verber et al for such integrated optical structures.

Both Hoppe et al and Naya et al teach that the sample may be a binding pair.

The exact number of test areas can be selected by those in the art as appropriate for the application at hand. Those in the art know how to choose appropriate wavelengths of use in such surface plasmon tests, and known how to select

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appropriate materials for the surface plasmon test, Naya mentions that the metal film may be "gold, silver or the like (column 4, lines 36-36).

3. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (571) 272-2428.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger 16 April 2004

Richard A. Rosenberger Primary Examine